

2019 Annual Green Tier Report – KS Kolbenschmidt, US Inc., Marinette, WI

KS Kolbenschmidt US, Inc. (KS KUS) is located in Marinette, WI and produces pistons for passenger cars as well as light- and medium-duty commercial vehicle engines. The latter part includes a range of piston products for marine, industrial and leisure applications (motor boats and motorbikes). Being in the industry for over 72 years, KS KUS is an industry leader in responding to environmental impacts throughout the automotive industry.

- The facility has been certified to the ISO 14001 standard since 2002 and was accepted into the Green Tier Program in November of 2014. With a mature EMS system in place, continuous improvement to the system require continued diligence and challenge to the management and employees. The EMS continues to meet and exceed expectations and is on track to reach the facility-wide environmental goals.

- An important aspect of the EMS is maintaining the achievements already realized since 2002 and continuing to set objectives that will drive the EMS forward. The EMS is defined by upper management which has a strong commitment to the environment. KS KUS strives to continually improve the workplace and prevent harmful situations for both employees and the environment. Key elements of the EMS include compliance with all applicable legal requirements, maintaining past environmental objectives and targets, and setting and reviewing new objectives.

EMS AUDIT REPORT

The annual external audit of the ISO14001 EMS by a certification body was most recently conducted in July 2018 by TUV Rheinland. The audit was a transition/surveillance audit to the new ISO14001:2015 standard.

The 2018 audit reported two non-conformities; all corrected and closed to the satisfaction of TUV. Three opportunities for improvement were recommended for consideration. Positive observations included good Good demonstration of internal communication through monthly meeting with upper management and daily meeting with employees.



DESCRIPTION OF PROGRESS


Key objectives and final results defined in 2018 are listed below:

2018 ISO14001 Environmental Objectives & Targets						
Objective	Action by	Date for completion	Target/Measure of success	Actions	Result	Comment on Result
Reduce water and electricity by 2% (EMS CP Aspect- Industrial Waste)	Operations	12/31/2018	Charts - 2% improvement from 2017 (Electricity 2017 5.94% 2018 Goal 5.82%) (Water 2017 3.9% 2018 Goal 3.8%)	Shift structure change Equipment removal /realignment: MD Batch processes, Shoun 1, Articulated cells.	Electricity - 5.95 vs goal of 5.82. Water 3.91 vs. goal of 3.8	Product mix changed from Automotive pistons to high demand for Diesel/Steel product. Due to the larger size of this product more electricity and water usage is required to produce the parts. Also during 2018 it was identified that the Central Melt area changed the melt time so more aluminum was melted during peak 1st shift hours rather than 2nd/3rd shift off peak, thus using higher energy costs.
Increase Facility awareness of recycling. Reduce or no increase in landfill, improve recycling. (EMS CP Aspect- Recycling, Solid Waste)	ISO14001 Task team / Purchasing	12/31/2018	Energy database. Landfill (no increases) and monitor recycling tonnage. (Some changes may result in a reduction of recycling - reuse of pallets/reduction of incoming cardboard)	Increase employee awareness of requirement to recycle plastics, cardboard - Communication, reinforce discipline. Identify how to determine highest cardboard usage area. Work with Purchasing to investigate and implement changes to reduce incoming cardboard.	Landfill: 2018 22.030 tons vs 2017 22.051 tons. Recycling: 2018 - .05 pounds vs. 2017 - .039 pounds	January and July were high landfill months - furnace relines took place in January, June, July and October which would increase amount of refractory disposed of in landfill. Improvement in communication of recycling in 2018 on bulletin boards, newsletters, postings, marking containers, etc. <u>Plastics and aluminum cans recycled with Waste Management are not included in recycling report as WM does not provide a report for this.</u>
Go Paperless Quality / Accounting documents (EMS CP Aspect - Natural Resource)	1) Quality, Production 2) Accounting	12/31/2018	20% reduction in paper purchased from paper supplier.	1) Reduce or eliminate use of paper copies for BMS documentation (procedures, WI, forms). 2). Accounts Payable- implement software for paperless system (test in Feb 2018)	4% improvement achieved	167 fewer reams of paper used in 2018.

Key objectives in 2019 are listed below:

2019 ISO14001 Environmental Objectives & Targets					
Item #	Objective	Action by	Date for completion	Target/Measure of success	Actions
1	Increase Facility awareness of recycling. Reduce or no increase in landfill, improve recycling. (EMS CP Aspect- Recycling, Solid Waste)	All Employees	12/31/2019	Energy database. Landfill (no increases) and monitor recycling tonnage. (Some changes may result in a reduction of recycling - reuse of pallets/reduction of incoming cardboard)	Increase employee awareness of reducing waste: increase recycling of all approved waste products. Reusable drink containers vs paper, reduce cardboard usage. See actions tab.
2	Go Paperless Quality / Accounting documents (EMS CP Aspect - Natural Resource)	All Employees	12/31/2019	5% reduction in paper purchased from paper supplier.	Continue to look for ways to reduce paper: double sided printing, increase use of electronic recordkeeping vs. paper, reduce wasted printing. See actions tab.
3	Reduce cost of melting ingot in foundry	M Boye/G Hollsten	12/31/2019	Energy cost savings- TBD	Run induction furnaces for melting on off peak hours

As a mature EMS, we are always striving to maintain and improve historical accomplishments. Monitoring and reporting recycling data is important to stay on track. Key recycling areas are maintained and communicated to all associates within the organizations:

<div>  KS KUS ISO 14001 Pollution Prevention! </div>												
Recycling & Beneficial Reuse Accomplishments												
Program			2013	2014	2015	2016	2017	2018				
								1st Qrt	2nd Qrt	3rd Qrt	4th Qrt	YTD
▶	Onsite Chip Recycling	tons	4,047	4,124	3,890	3,420	3,460	866	921	831	741	3,360
▶	Onsite Scrap Recycling	tons	4,688	4,475	3,625	3,174	3,032	781	761	728	631	2,901
▶	Spill Socks & Pads Program	tons	39	44	52	46	50	12.4	11.8	12.8	9.7	47
▶	Copper Mesh & Wire	pounds	914	218	252	257	1,380	-	322	-	-	322
▶	Steel Turnings, Misc. Steel, Misc Steel w/ turnings, & Sheet Iron	tons	1,042	1,117	1,269	899	995	307	312	313	342	1,273
▶	Aluminum Dust	pounds	113,960	85,100	103,600	90,980	91,200	24,440	12,020	13,840	30,860	81,160
▶	Fluorescent Bulbs	bulbs	2,189	1,063	1,398	1,459	1,391	362	427	200	196	1,185
▶	Batteries (Facility & Associate Household)	pounds	2,534	3,919	1,900	791	1,376	490	551	161	-	1,202
▶	Computer Equipment	pounds	397	4,758	100	5,003	5,245	1,689	1,505	-	1,474	4,668
▶	Wood, Cardboard, and Paper	tons	1,730	583	335	246	231	71	70	84	72	297
▶	Used Oil Recycling	gallons	4,450	8,200	1,950	7,500	4,200	3,500	4,350	4,150	4,350	16,350
▶	Sodium Hydroxide Beneficial Reuse (Ultrasonic Cleaner)	gallons	2,800	1,300	600	650	1,025	-	-	1,000	-	1,000

TRANSPORTATION

Being a world class piston manufacturer means the KS KUS has shipments leaving the plant for destinations across the nation on a daily basis. However, KS KUS tries to balance out the effects on the environment by providing workers with opportunities to burn a little less fuel. All locker rooms in the facility are equipped with showers, and bike racks are available at most entrances. All lunch rooms now have a dedicated board for healthy living, where employees can find recipes, recycling and energy saving tips, and ideas to help get active.

STAKEHOLDER INVOLVEMENT

KS KUS strives to maintain open relationships with employees and community members. KS KUS builds employee awareness about environmental issues through a comprehensive recycling program, weekly safety meetings, quarterly trainings, postings and newsletter articles. KS KUS is actively involved with the local Chamber of Commerce and has representatives on several community event committees. Tours of the KS KUS facility take place several times a year for local businesses, schools, and state and local political representatives, highlighting the technology and recycling practices in place within the facility. Maintaining an open door policy is imperative for company success – any employee or community member may speak with management about safety or environmental concerns at any time. Pistons are designed with the environment in mind, including end of life recycling and reduction of engine emissions.

DNR RELATIONSHIP

KS KUS has maintained a history of compliance with all major environmental regulations. Current permits are held under the Clean Air Act (State Operating Permit), WPDES, and local wastewater utility. The facility is also subject to the Oil Pollution Act (SPCC), EPCRA, TSCA, NESHAPs, Hazardous Materials Shipping and European Union requirements. The Green Tier program has been a positive for the facility with its relationship with the DNR. Green Tier has helped increase the partnership with both Air Program and Waste Program contacts.

CONCLUSION

KS KUS continues to be dedicated to the environment and increased environmental awareness of the automotive industry. Local, state, national, and worldwide stakeholders have a positive effect on the facility's EMS. The commitment to regulatory compliance and reducing environmental impacts has been at the core of the business planning. The commitment by management to the EMS has put KS KUS in great position to meet the expectations of the ISO14001:2015 standard which will cover the 2018 audit. The EMS implemented in conformance with ISO14001, and in accordance with Green Tier, has provided an organizational structure to drive lasting and meaningful improvements.